

The University Learning Mission, College Health and the Health Agenda

“Policymakers need to begin thinking in terms of a health agenda instead of a health care agenda.”

McGinnis, Williams-Russo and Knickman, 2002, p. 89

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Nationally, there is an imbalance of investments in medical care compared to health promotion and disease prevention activities. This imbalance is true for most college health programs. The fact that the top health impediments to successful academic performance are driven by conditions that are preventable ought to draw attention to policy opportunities for promoting health in the student population. This paper explores determinants of health and academic success, factors inhibiting policy attention and resource commitment to non-medical determinants of health and suggests approaches to sharpen the focus on academy's disease prevention and health promotion to achieve the learning mission in higher education.

Despite the evidence that prevention works, the focus in our health care system over the past century has not been on prevention of chronic disease, but on treatment of short-term, acute health problems. As a nation, we have emphasized expensive cures for disease rather than cost effective prevention.^{1, p. 7} Additionally, the fact that medical care has had limited impact on the health of populations has been known for many years.²

Costs and Benefits of Health Care and Health Promotion

The plight of college health programs being able to address the learning mission of universities can be compared to the Nation's unbalanced approach to health. Approximately 95% to 97% of the dollars spent on health go to direct medical care services, while just 3% to 5% is allocated to population wide approaches to health improvement.^{3, p. 580} However, some 40% of deaths are caused by behavior patterns that could be modified by health promotion interventions. Additionally, social circumstances and environmental exposure also contribute substantially to preventable illness and academic morbidity. A much smaller proportion of preventable mortality in the United States, about 10% to 15%, could be avoided by better availability or quality of medical care.^{4, p. 78} We should question a funding scheme that places so much emphasis on medical care and not on prevention.

A similar trend on spending and focus occurs in college health programs. Student health services (SHS) have a focus on clinical approaches to disease and prevent virtually no academic mortality and morbidity. There is no documentation to date that show that clinical approaches reduce academic mortality and morbidity associated with the top

health impediments to learning.⁵ It should be noted that SHSs cannot increase retention without relying heavily evidence-based health promotion services. Health promotion can reduce academic morbidity and at the same time improve the quality of student life. However, it cannot do these without policy changes and resources considered by thought leaders from disciplines far beyond the health area.

The question of clinical care aiding in academic retention is asked often on the SHS electronic mailing list. A response from to an email with the subject "Urgent! Retention Data Needed" is indicative that there is no evidence that clinical approaches to disease are related to the learning mission of higher education.

"[I] Started in college health in 1965---have tried to document/find documentation; have tried to figure out how to do prospective / retrospective studies since then on this issue. The data "ain't" there . . ."⁶

The only published study showing improvements in retention due to an SHS intervention used preventive screenings and health education. Rutgers University officials offered economically disadvantaged freshmen thorough physical examinations, providing treatment when necessary, and counseling them on health matters. The exams revealed primarily social, behavioral and environmental health problems if anemia, obesity, high blood pressure and sexually transmitted infections. Additionally, the students had very poor nutrition.

The students were given a six-hour health education class. Equal Opportunity Fund Program (EOF) student users had fewer unplanned pregnancies (2% vs. 7%) a year after the program started. 24% of women and 10% of men were treated for STDs compared to 8% and 6% of EOF students prior to the program. The article says the SHS and EOF directors were able to correlate classroom attendance, retention and grade point average to utilization of health services.⁷ A small study on different outcomes of SHS use at Cal Poly Pomona found that about 50% of the 44% who had used the SHS believed that it helped them avoid missing class or being late for a class.⁸

A reply to an SHS email list message that included the above data stated:

"did anyone else wince when the only medical problems we cite . . . were unwanted pregnancies and sexually transmitted infections."⁹

At a minimum we need to allocate enough health dollars to disease prevention and health promotion to allow use of evidence-based interventions that achieve one of the only two national health objectives in **Healthy People 2010**. In **Healthy Campus 2010** Objective 7-3 has a target that at least 55% of the students will be able to recall health information that students can recall.¹⁰ Fifty-five percent is the target for implementation measures of recalling having received information on each of 11 priority health topics. We need to expand our investments in promoting population health and reducing the demand for spending necessary to restore health with a health agenda that is significantly broader than the current health care agenda.

The Leading Determinants of Student Health

Much of our understanding of the factors that shape the health of students has come from National College Health Assessment data linking where and how students live to their academic and health futures. This gives insights on behavioral choices, social circumstances and environmental conditions related to the mission of the university. The health and academic performance of students is the result of multiple areas.

Behavioral Choices. Behavior patterns represent the single most prominent domain of influence over health prospects for college students. The daily choices they make with respect to coping strategies in confronting stress, cigarette smoking, diet and physical activity are the leading factors of health and academic success. Choices about sexual behavior, the substance abuse; their approaches to safety are important but affect an extremely small proportion of students - only about 10% to 25% of that recorded for mental health impediments.

Inadequately dealing with stress, relationships, sleep difficulties, concerns for family members and friends, deaths of loved ones and feelings related to depression are the most frequent causes of poor academic performance. Nearly one-third of students were affected by at least one of these factors.

Cigarette smoking and what students choose to eat and how they design activity into (or out of) their lives have a bearing on their health and academic prospects. Over 20% are current smokers and they are 50% more likely to have academics affected by colds, flu and sore throat than non-smokers. Even poor nutrition and physical inactivity are related to poor academic performance. Not eating five or more servings of fruits and vegetables is associated with poor academic performance due to colds, flu and sore throat. The relationship also occurs with low days per week of physical activity.

Three health areas are far from being related to the academic mission, though they are important issues. These are sexual behaviors, substance use and assault. These also typically receive the majority of health promotion funding and policy attention. Unprotected sexual intercourse results in poor academic performance for less than 3% of students. Pregnancy, whether planned or unplanned affects academic performance of only 1% of students. Substance abuse affects academic performance of only a few students compared to the mental health issues and colds, flu and sore throat issues. Eight percent of students receive lower grades on papers, projects and courses or drop out due to alcohol use. Other drug use only affects the academic performance of 2.7% of students. Safety issues involving sexual and physical assault affect the academic success of one-half to three-quarter percent of students.

Social Circumstances. Our first encounter is with the area of social circumstances. Health of the Nation's population is powerfully influenced by education, employment, income disparities, poverty, housing, crime, and social cohesion. From the cradle to the grave, interpersonal linkages matter. However, for college students, these often have a reverse affect. Students of color, particularly, Asian/Pacific Islander and African American/Black abuse alcohol and other drugs and have unsafe sex significantly less

than other groups. Generally the White students, who have better social circumstances, are the ones who have the greatest problems with AOD and sexual behaviors. It appears that the cultural (interpersonal linkages) influences surrounding becoming a college students affects students more than other social circumstances.

Environmental conditions. Health status and behavior are affected by physical environments. The places where students live, study and work can present hazards in the form of hazards. Though toxic agents from occupational products, environmental pollutants, chemical contaminants of food and water supplies, and components of commercial products have been associated with skin diseases, cancers, allergies, and other diseases of various organ systems these hazards are generally well controlled by university policies. However, the “toxic environment”¹¹ also impedes the ability to be physically active and maintain a healthful diet which, as noted earlier, are related to colds, flu and sore throat. Physical activity courses are not required and parking structures and shuttles services are built to encourage inactivity. The fast food industry is increasingly being considered a “demon industry,” a villain threatening American youth.¹² University policies provide safety from toxic agents, products and pollutants but are non-existent with regard to the toxic agents that related to health and academic performance.

Why are Non-medical Determinants of Health Not Addressed?

Few health dollars are devoted to promoting health. A dominant factor in the past slowing investments that address the non-medical determinants of health has been a lack of agreement on what could be done to change factors such as behavioral choices, social conditions, and the physical environment. Very good evidence is emerging about health-promoting interventions that do work.

Dominant factors hindering investments in college health promotion resources were lack of knowledge on and a cynicism about what could be done. Additionally, not having tools demonstrating consensus such as the American College Health Association's National College Health Assessment (NCHA) data, the national health goals and objectives of Healthy Campus 2010 and the Standards for Practice of Health Promotion in Higher Education have resulted in a minority of students actually being helped. Only a small number of health educators are expected to and can work in more than one or two health areas. These staff may only be able to and were required only to work on personal and interpersonal approaches and limited community efforts on sexual responsibility, HIV and AIDS, or alcohol abuse issues.

Sharpen the Focus on Disease Prevention and Health Promotion

Recently recommendations for improving health and quality of life have been proposed. These would also improve academic performance. The Institute of Medicine, in its report *Promoting Health*, has two recommendations necessary to improve health.¹³ These are:

- A better balance is needed between the clinical approach to disease, presently the dominant public health model for most risk factors, and research and intervention efforts that address generic social and behavioral determinants of disease, injury and disability.
- Rather than focusing interventions on a single or limited number of health determinants, interventions on social and behavioral factors should link multiple levels of influence (i.e., individual, interpersonal, institutional, community, and policy levels).

McGinnis, Williams-Russo and Knickman^{4, p. 87-90} provide three key elements for creation of the health agenda:

- Health promotion leaders must inform and motivate the public, the people who benefit from prevention, and policymakers about the power of prevention and health promotion to increase longevity and improve quality of life.
- We must create regulatory strategies and financial incentives to facilitate social, behavioral and environmental change. Examples are taxes on high fat and sugar foods and grants-in-aid to encourage communities to develop bike paths. Other incentives are information interventions (social marketing), direct regulation, and indirect regulation through the legal system (i.e., law suits against false advertising).
- We need to improve the science base to better understand the factors and interactions of non-medical determinants of health. An important research priority is to increase the understanding of how social marketing and behavior change interventions can be designed to implement to work at the population level. Research on the cost effectiveness to give believable economic (and learning mission) guidance for policymakers should be done.

Successful Health Promotion Investments Must be Used

Typical college health programs attempt to provide information and let the community know students are cared about, and hope the right students attend presentations and events. Most programs that go the next level target specific student groups with health issues unrelated to the university mission. These are ineffective at helping achieve the learning mission of universities. There are three levels of health promotion programs from basic information giving, traditional programs attempting to target at-risk students to effective programs called “health and productivity management” programs.

The most successful level of programming (the level where most innovative organizations are headed) is called Health and Productivity Management. In this model a data is collected on the entire population of students. This is an epidemiologically sound approach to begin programs. Typical program design is extended to the population of students using an ecological and multifaceted approach that include the incentive of required academic course, social marketing and policy implementation. Two required courses should be one on personal health and one stress management. Social

marketing would provide reinforcement of skills learned in the courses throughout the academic life of the students with point of decision prompts. Policies to change the environment of vending machine and cafeteria food choice costs and availability, plus required physical education classes and safe and convenient walking paths to classes. Social marketing would provide reinforcement throughout the academic life of the students with point of decision prompts for each priority health issue. Policies to change the environment of vending machine and cafeteria food choice costs and availability, plus required physical education classes and safe and convenient walking paths to classes.

Tools are now available for institutions of higher education to simplify implementation of health and productivity management level programs. **Healthy People 2010** is a successful health promotion investment.^{4, p. 86-87} ACHA's companion document, **Healthy Campus 2010**, is also becoming a successful investment. Evidence of improvements in population health emerges from the healthy people national initiative. Measurable targets for health improvement have largely been reached over the last 20 years. For universities using measurable targets a few campuses have reduced binge drinking and increased responsible sexual behavior.

Conclusion

The imbalance in investments in health promotion and disease prevention at the university level has resulted in a focus on medical care and ineffective health promotion programs. Few universities have health agendas that allow them to use successful health promotion interventions and tools the leading learning mission related health problems have not been addressed. These are problems that cause academic difficulties for 15% to 32% of students and include:

- stress
- relationship difficulties
- sleep difficulties
- concern for a troubled family member or friend
- colds/flu, and sore throat
- death of a loved one and
- depression/anxiety.

Additionally, under the current health care agenda the penetration and reach is inadequate to achieve National 2010 targets. Objective 7-3 shows that at most about half of students have received information on any one the leading college health indicator. Mental health is a significant issue for students yet only 11% of students received information on suicide prevention. Only 6% of students received information on all six of the **Healthy People 2010** leading health indicators and only 3% received information on all eleven of the **Healthy Campus 2010** college health indicators. The targets for each individual health area are 55% and for all the 2010 areas are 25% and 17% respectively. These problems can be reduced with health and productivity evidence-based prevention and health promotion programs.

To achieve the university mission to enhance learning and knowledge a health agenda must be implemented. The imbalance of investments in medical care compared to disease prevention and health promotion activities of most college health programs must be addressed. The fact that the top health impediments to academic performance are driven by conditions that are preventable ought to draw attention to policy opportunities for promoting health in the student population. As understanding and awareness of effective health promotion tools and interventions increases, broader leadership is necessary to gather the determination to change from a clinical approach to disease to disease prevention and health promotion. Thought leaders, vice presidents and deans, from disciplines far beyond the health sector must become engaged in the discussion, debate, and leadership.

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